In the Claims:

This listing of claims will replace all prior versions and listings, of claims in the application:

1. (currently amended) A thermally enhanced electronic module, comprising:

a thermally conductive case;

a self-aligning thermally conductive heat sink, wherein the case includes a substantially semi-spherical pivot area with a first shape formed into the case for receiving a first portion of the heat sink, and wherein the first portion of the heat sink has a second shape that is complimentary to the first shape; and

a die with a first surface and a second surface opposite the first surface, wherein the die is mounted to a substrate with the first surface of the die facing the substrate, and wherein the second surface of the die is in thermal contact with the heat sink.

2. (original) The module of claim 1, wherein the substrate is a ceramic substrate.

3. (original) The module of claim 1, further including:

a thermally conductive film located between the die and the heat sink.

4. (original) The module of claim 1, further including:

one of a thermally conductive grease and a thermally conductive adhesive located between the case and the heat sink.

5. (currently amended) The module of claim 1, wherein the first shape of the pivot area is semi-spherical concave and the second shape of the heat sink is semi-spherical convex.

6. (original) The module of claim 1, wherein the die includes at least one of a field effect transistor (FET), an insulated gate bipolar transistor (IGBT), a power flip chip and a power package.

7. (original) The module of claim 1, wherein the substrate is one of a laminate substrate, a ceramic substrate, an aluminum oxide substrate, a silicon nitride substrate and a low temperature co-fired ceramic substrate.

8. (currently amended) A thermally enhanced automotive electronic module, comprising:

a thermally conductive metal case;

a self-aligning thermally conductive heat sink, wherein the case includes a substantially semi-spherical pivot area with a first shape formed into the case for receiving a first portion of the heat sink, and wherein the first portion of the heat sink has a second shape that is complimentary to the first shape; and

a die with a first surface and a second surface opposite the first surface, wherein the die is mounted to a substrate with the first surface of the die facing the substrate, and wherein the second surface of the die is in thermal contact with the heat sink.

9. (original) The module of claim 8, wherein the substrate is a ceramic substrate.

10. (original) The module of claim 8, further including:

a thermally conductive film located between the die and the heat sink.

11. (original) The module of claim 8, further including:

one of a thermally conductive grease and a thermally conductive adhesive located between the case and the heat sink.

12. (currently amended) The module of claim 8, wherein the first shape of the pivot area is semi-spherical concave and the second shape of the heat sink is semi-spherical convex.

13. (original) The module of claim 8, wherein the die includes at least one of a field effect transistor (FET), an insulated gate bipolar transistor (IGBT), a power flip chip and a power package.

14. (original) The module of claim 8, wherein the substrate is one of a laminate substrate, a ceramic substrate, an aluminum oxide substrate, a silicon nitride substrate and a low temperature co-fired ceramic substrate.

15. (currently amended) A method for manufacturing a thermally enhanced electronic module, comprising the steps of:

forming a substantially semi-spherical pivot area into an inner surface of a thermally conductive case;

positioning a substrate including a die within the thermally conductive case, wherein the die includes a first surface and a second surface opposite the first surface, and wherein the die is mounted to the substrate with the first surface of the die facing the substrate; and

positioning a portion of a self-aligning thermally conductive heat sink into the pivot area and in thermal contact with the second surface of the die and the case.

16. (original) The method of claim 15, further including the step of:

providing a thermally conductive film between the die and the heat sink.

17. (original) The method of claim 15, further including the step of:

providing one of a thermally conductive grease and a thermally conductive adhesive between the case and the heat sink.

18. (currently amended) The method of claim 15, wherein a shape of the substantially semi-spherical pivot area is concave and a shape of the heat sink that positioned in the substantially semi-spherical pivot area is convex.

19. (original) The method of claim 15, wherein the die includes at least one of a field effect transistor (FET), an insulated gate bipolar transistor (IGBT), a power flip chip and a power package.

20. (original) The method of claim 15, wherein the substrate is one of a laminate substrate, a ceramic substrate, an aluminum oxide substrate, a silicon nitride substrate and a low temperature co-fired ceramic substrate.

21. (new) The module of claim 1 further comprising an elastomer member disposed between the substrate and the thermally conductive case.

22. (new) The module of claim 8 further comprising an elastomer member disposed between the substrate and the thermally conductive metal case.

23. (new) The method of claim 15 further comprising the step of positioning an elastomer member between the substrate and the thermally conductive case.